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WO 2004/050860 A3

(54) Title: COMPOSITIONS, SPLICE VARIANTS AND METHODS RELATING TO COLON SPECIFIC GENES AND PROTEINS

(57) Abstract: The present invention relates to newly identified nucleic acid molecules and polypeptides present in normal and neoplastic colon cells, including fragments, variants and derivatives of the nucleic acids and polypeptides. The present invention also relates to antibodies to the polypeptides of the invention, as well as agonists and antagonists of the polypeptides of the invention. The invention also relates to compositions containing the nucleic acid molecules, polypeptides, antibodies, agonists and antagonists of the invention and methods for the use of these compositions. These uses include identifying, diagnosing, monitoring, staging, imaging and treating colon cancer and non-cancerous disease states in colon, identifying colon tissue, monitoring and identifying and/or designing agonists and antagonists of polypeptides of the invention. The uses also include gene therapy, production of transgenic animals and cells, and production of engineered colon tissue for treatment and research.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/40063

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12N 15/12, 15/00; C12Q 1/68; C12P 21/02; A61K 31/711, 31/7088
 US CL : 536/23.1, 23.5, 24.31, 24.3; 435/6, 320.1, 252.3, 325, 69.1; 514/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 536/23.1, 23.5, 24.31, 24.3; 435/6, 320.1, 252.3, 325, 69.1; 514/44

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Compugen (ABSS), SEQ ID NOs: 1 and 96

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/77168 A2 (CORIXA CORPORATION) 18 October 2001 (18.10.2001), Abstract, pages 57-63 and 73-83, compare SEQ ID NO: 1, nucleotides 384-547 of instant application to SEQ ID NO: 414, nucleotides 2105-2268.	1-6, 8-10, 16, and 18

Further documents are listed in the continuation of Box C.

See patent family annex.

<input type="checkbox"/> Special categories of cited documents: <input type="checkbox"/> "A" document defining the general state of the art which is not considered to be of particular relevance <input type="checkbox"/> "E" earlier application or patent published on or after the international filing date <input type="checkbox"/> "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) <input type="checkbox"/> "O" document referring to an oral disclosure, use, exhibition or other means <input type="checkbox"/> "P" document published prior to the international filing date but later than the priority date claimed	<input type="checkbox"/> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention <input type="checkbox"/> "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone <input type="checkbox"/> "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art <input type="checkbox"/> "&" document member of the same patent family
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Date of the actual completion of the international search

25 March 2005 (25.03.2005)

Date of mailing of the international search report

08 APR 2005

Name and mailing address of the ISA/US

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/40063

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claim Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-10 and 15-18 as they pertain to SEQ ID NOS: 1 and 96

Remark on Protest

The additional search fees were accompanied by the applicant's protest.
No protest accompanied the payment of additional search fees.